

1 **CLAIMS**

2 1. A method, comprising:  
3 periodically identifying a location of a first computer that is used by a first  
4 computer user;  
5 receiving a request from a computing unit for the location of the first  
6 computer user;  
7 determining the last known location of the first computer;  
8 transmitting the location of the first computer to the computing unit; and  
9 recognizing the location of the first computer as the location of the first  
10 computer user.

11  
12 2. The method as recited in claim 1, wherein the first computer is a  
13 mobile computer operating within a wireless network.

14  
15 3. The method as recited in claim 1, wherein the periodically identifying  
16 a location of the first computer comprises:  
17 associating the first computer user with the location of the first computer;  
18 transmitting the location of the first computer and the associated first  
19 computer user to a network server during each of several recurring time periods;  
20 and  
21 storing the transmitted information on the network server.

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23 4. The method as recited in claim 3, wherein the location of the first  
24 computer is represented in absolute geographical coordinates.  
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2       **10.**     The method as recited in claim 8, wherein the determining the last  
3 known location of the first computing unit further comprises:

4       calculating a time differential between a current time and the time stamp of  
5 a most recent location identified for the first computer;

6       comparing the time differential with a pre-defined time threshold;

7       defining the last known location of the first computer as the most recent  
8 location if the time differential is less than the time threshold; and

9       invoking a location tracking service to identify a current location of the first  
10 computer as the last known location if the time differential is greater than the time  
11 threshold.

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13       **11.**     The method as recited in claim 1, wherein:

14       the periodically identifying a location of a first computer that is used by a  
15 first computer user further comprises periodically identifying a location of at least  
16 a second computer that is used by the first computer user and detecting an active  
17 signal from the computer that was most recently used by the first computer user;  
18 and

19       the determining the last known location of the first computer comprises  
20 determining the last known location of the computer indicating the active signal.

1           12.    The method as recited in claim 1, wherein the determining the last  
2 known location of the first computing unit further comprises:

3           searching a server database having a plurality of computer users and  
4 locations contained therein; and  
5           identifying a location associated with the first computer user.

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7           13.    The method as recited in claim 1, further comprising registering the  
8 first computer, and wherein the identifying a location of the first computer only  
9 occurs upon the receiving a request from the computing unit for the location of the  
10 first computer.

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12           14.    The method as recited in claim 1, wherein the last known location of  
13 the first computer is transmitted to the computing unit upon a request by the  
14 computing unit only if the computing unit is authorized to determine the location  
15 of the first computer.

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17           15.    The method as recited in claim 1, further comprising encrypting the  
18 location of the first computer prior to transmitting the location of the first  
19 computer.

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21           16.    A method, comprising:  
22           determining a location of a computing unit;  
23           periodically transmitting, from the computing unit, the location of the  
24 computing unit to a network server together with a user name of a user using the  
25 computing unit; and

1 including an active signal with the periodically transmitted information  
2 when the user is actively using the computing unit.

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4 **17.** The method as recited in claim 16, wherein:  
5 the computing unit is a mobile computing unit; and  
6 the network server is a wireless network server.

7  
8 **18.** The method as recited in claim 16, further comprising time-  
9 stamping the transmission to the network server and transmitting the time stamp  
10 with the transmitted information.

11  
12 **19.** The method as recited in claim 16, wherein the determining a  
13 location of a computing unit comprises receiving RF signals from a plurality of RF  
14 beacons having known locations and using environmental profiling to establish the  
15 location of the computing unit.

16  
17 **20.** The method as recited in claim 16, wherein the location is rendered  
18 in latitude and longitude coordinates.

19  
20 **21.** The method as recited in claim 16, wherein the location is rendered  
21 in latitude, longitude and altitude coordinates.

22  
23 **22.** The method as recited in claim 16, wherein the location is rendered  
24 in coordinates relative to a known location.  
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1 last known location field for storing a most recent location of a computer user  
2 identified in a corresponding user field;

3 a wireless access point configured to receive network transmissions from  
4 one or more mobile computers;

5 a mobile computer having memory and a wireless network interface for  
6 communication with the wireless access point;

7 a location tracking system in the mobile computer memory configured to  
8 determine a location of the mobile computer;

9 a location manager in the mobile computer memory configured to  
10 periodically transmit the location of the mobile computer and the user name of a  
11 mobile computer user to the server via the wireless network interface; and

12 a computing unit having a computing unit location manager configured to  
13 search the user database of the server to determine information regarding the  
14 location of a mobile user.

15  
16 **29.** The system as recited in claim 28, wherein the computing unit is a  
17 stationary computing unit.

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19 **30.** The system as recited in claim 28, wherein the computing unit is a  
20 mobile computing unit.

21  
22 **31.** The system as recited in claim 28, wherein:  
23 the mobile computer further comprises a clock;





1       **37.**     The system as recited in claim 28, wherein:  
2       the mobile computer is a first computer;  
3       the system further comprises a second computer having a location manager;  
4       the user database further comprises an active field;  
5       the mobile computer user is logged onto both the first mobile computer and  
6       the second computer;  
7       the location manager of the first computer and the location manager of the  
8       second computer are further configured to transmit an active signal for a specified  
9       period of time after the respective computers are used;  
10       the active field corresponding to the first computer indicating the mobile  
11       computer user last used the first computer when the active signal is transmitted  
12       from the first computer;  
13       the active field corresponding to the second computer indicating the mobile  
14       computer user last used the second computer when the active signal is transmitted  
15       from the second computer; and  
16       only one active field indicating activity by the mobile computer user at any  
17       given time.

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19       **38.**     The system as recited in claim 28, wherein:  
20       the user database further comprises an OK field that contains data that  
21       identifies one or more system users that are authorized to receive data regarding  
22       the location of the mobile computer user identified in the corresponding user field.  
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24  
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1           39.     The system as recited in claim 28, wherein the location manager of  
2 the computing unit is further configured to:

3                 search the user database to locate an entry for a specific user;  
4                 calculate a time differential between a current time and a time stored in the  
5 time field corresponding to the specific user if the specific user is found;

6                 compare the time differential to a time threshold;  
7                 recognize the location contained in the last known location field  
8 corresponding to the specific user as the location of the specific user if the time  
9 differential is within the time threshold;

10                transmit a signal to cause the location manager of the mobile computer to  
11 invoke the location tracking system of the mobile computer if the time differential  
12 is not within the time threshold, to determine the location of the mobile computer  
13 and transmit location and user information to the server where it is stored in the  
14 user database; and

15                recognize the newly stored location contained in the last known location  
16 field corresponding to the specific user as the location of the specific user.

1       **40.**    A network server, comprising:  
2       memory;  
3       a user database stored in the memory containing one or more records, each  
4       record including:  
5               a user field in the user database to store a user identifier; and  
6               a last known location field in the user database to store a most recent  
7       location identified for the corresponding user field.

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9       **41.**    The network server as recited in claim 40, wherein each record  
10      further comprises a time field to store a time that the corresponding last known  
11      location was stored.

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13      **42.**    The network server as recited in claim 40, wherein each record  
14      further comprises an active field to store an indication of whether the user  
15      identified in the corresponding user field has been active on a client connected to  
16      the server within a specified period of time.

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18      **43.**    The network server as recited in claim 40, further comprising a  
19      wireless access point to which a mobile computing unit may connect to access the  
20      network.

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22      **44.**    The network server as recited in claim 43, further comprising a  
23      connection to wired network components.



1           **49.**   The mobile computing unit as recited in claim 45, wherein the  
2 location manager identifies and transmits the location of a network node with  
3 which the mobile computing unit is communicating as the location of the mobile  
4 computing unit.

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6           **50.**   The mobile computing unit as recited in claim 45, wherein the  
7 location manager is configured to invoke the location tracking service when  
8 commanded to do so by a second computing unit or the server.

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10          **51.**   The mobile computing unit as recited in claim 45, wherein the  
11 location manager transmits an absolute location of the mobile computing unit to  
12 the remote server.

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14          **52.**   The mobile computing unit as recited in claim 45, wherein the  
15 location manager transmits the a location of the mobile computing unit relative to  
16 a known absolute location.

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18          **53.**   The mobile computing unit as recited in claim 45, wherein the  
19 location manager transmits a geographic region to the remote server as the  
20 location of the mobile computing unit.

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22          **54.**   The mobile computing unit as recited in claim 45, wherein the  
23 location manager is further configured to encrypt the location of the mobile  
24 computing unit before transmitting the location of the mobile computing unit to  
25 the remote server.



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58. A system, comprising:

a server having memory;

a user database stored in the memory of the server, the user database containing a user field for storing a user name of a mobile computer user, and a last known location field for storing a most recent location of a computer user identified in a corresponding user field;

a wireless access point configured to receive network transmissions from one or more mobile computers;

a mobile computer having memory and a wireless network interface for communication with the wireless access point;

a location tracking system in the mobile computer memory configured to determine a location of the mobile computer;

a location manager in the mobile computer memory configured to transmit the location of the mobile computer and the user name of a mobile computer user to the server via the wireless network interface when a request to do so is received from the server; and

a computing unit having a computing unit location manager configured to search the user database of the server to determine information regarding the location of a mobile user.